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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,294	03/29/2001	Yasuo Sasaki	057482/0160	6586

22428 7590 01/22/2003

FOLEY AND LARDNER
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3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 01/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-5

Office Action Summary

Application No.

09/806,294

Applicant(s)

SASAKI ET AL.

Examiner

Elizabeth M Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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1. Claim 1 is objected to because of the following informalities: The first two lines of claim 1 are repeated twice, once on page 1 of the response and once on page 2. Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 08-197,626 A (machine translation attached). JP 08-197,626 teaches a sheet which comprises at least two layers of unidirectional fiber bundles wherein the direction of the bundles of the first layer is at right angles to the direction of the bundles of the second layer. A third layer at an angle to the second may be added. See page 5 of detail description paragraph 0060. The bundles comprise thermoplastic resin powder which is attached to the bundles and which serves to bond the layers of the sheet together. JP 08-197,626 further discloses the claimed method of applying thermoplastic resin powder to the parallel fiber bundles, stacking the bundles and heating and pressing to form a bonded sheet. See page 4 of the Detailed Description, paragraph 0051-0052.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-7, 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 08-197,626 in view of Sasaki et al, U.S. Patent No. 5,308,424. JP 08-197,626 teaches a sheet which comprises at least two layers of unidirectional fiber bundles wherein the direction of the bundles of the first layer is at right angles to the direction of the bundles of the second layer. A third layer at an angle to the second may be added. See page 5 of detail description paragraph 0060 and the section entitled operation. The bundles comprise thermoplastic resin powder which is attached to the bundles and which serves to bond the layers of the sheet together. JP 08-197,626 further discloses the claimed method of applying thermoplastic resin powder to the parallel fiber bundles, stacking the bundles and heating and pressing to form a bonded sheet. See page 4 of the Detailed Description, paragraph 0051-0052. JP '626 does not teach arranging the fibers of the reinforcing layers at oblique angles. Sasaki et al teaches applying reinforcing fibers at oblique angles in order to improve the structural strength and dimensional stability. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have arranged the reinforcing fibers of JP '626 at oblique angles as taught by Sasaki in order to improve the structural strength and dimension stability of the material.

6. Applicant's arguments filed 11/13/02 have been fully considered but they are not persuasive. Applicant argues that JP 08-197,626 does not teach a nonwoven fabric. This

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argument is not persuasive for the following reasons: First, the recitation that the composite sheet is a nonwoven fabric is in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). In this case, the structure of the fibrous sheet is set forth in the body of the claim and therefore, the claim does not depend on the preamble for completeness. Second, the structure of JP 08-197,626 is the same as the claimed structure. Applicant argues that the JP '626 structure is a woven fabric because paragraph 0060 teaches including a glass fabric. However, all glass fabrics are not woven fabrics, and even if the glass fabric was a woven glass fabric, the presence of additional layers are not precluded by the claims as currently presented. '626 teaches two or more unidirectional layers which are laminated crosswise. See the section "Operation" of the machine translation. Therefore, '626 discloses the claimed invention and the rejection has been maintained.

Applicant's arguments regarding JP'748 have been considered but are moot in view of the new grounds of rejection.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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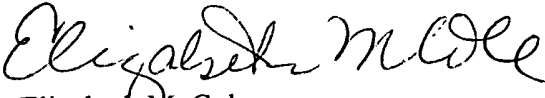
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.


Elizabeth M. Cole
Primary Examiner
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e.m.c

January 16, 2003